abcam

ab190966

Anti-GFPT2 antibody [EPR19095]

Anti-GFPT2 antibody [EPR19095] (ab190966) is a rabbit monoclonal antibody detecting GFPT2 in **Western Blot, Flow Cytometry (Intra), IP, ICC/IF**. Suitable for **Human, Mouse, Rat,**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 10 publications

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR19095
Purification technique	Affinity purification Protein A
Concentration	0.751 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse

Dilution info	1/50
Notes	-

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant fragment - Human
Dilution info	1/2000
Notes	-

Species	Mouse
Dilution info	1/2000
Notes	-

Species	Rat
Dilution info	1/2000
Notes	-

Species	Human
Dilution info	1/2000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/150
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-

Notes	-

Target data

See full target information Glutamine--fructose-6-phosphate aminotransferase [isomerizing] 2

Function	Rate-limiting enzyme of the hexosamine biosynthetic pathway (HBP) that catalyzes the formation of glucosamine-6-phosphate from fructose-6-phosphate and glutamine, thereby controlling the flux of glucose into this pathway (PubMed:35229715). Via control of the HPB, likely regulates the availability of precursors for N- and O-linked protein glycosylation (By similarity). Exhibits feedback inhibition by UDP-N-acetylglucosamine (UDP-GlcNAc), although to a lesser extent than GFPT1 (PubMed:35229715).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-GFPT2 antibody [EPR19095] (ab190966) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat, samples.

What is the molecular weight of GFPT2?
Anti-GFPT2 [EPR19095] (ab190966) specifically detects a band for GFPT2 (UniProt: O94808) at a molecular weight of 77kDa.

Trusted by the scientific community
Anti-GFPT2 [EPR19095] (ab190966) was first used in a scientific publication in 2015 and has been cited over 10 times in peer-reviewed journals.

Other related products
We have a range of other formats of antibody clone [EPR19095] also available for your convenience: ab190966, Alexa Fluor® 488 - ab215948, Alexa Fluor® 647 - ab215949, Carrier free - ab240316

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

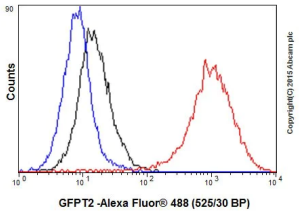
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

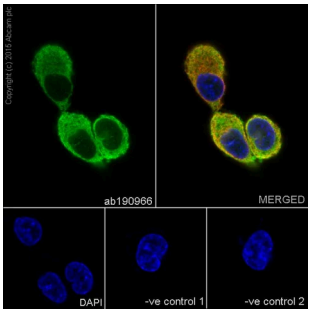
7 product images



Flow Cytometry (Intracellular) - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 Flow Cytometry (Intracellular) staining using rabbit Anti-GFPT2 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling GFPT2 with ab190966 at 1/150 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue).
Goat anti-Rabbit IgG (Alexa Fluor® 488) at 1/500 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GFPT2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling GFPT2 with ab190966 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal image showing cytoplasm staining on U-87 MG cell line.

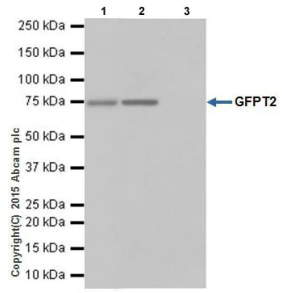
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab190966 at 1/500 dilution followed by ab150120 at 1/1000 dilution.

-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.



Immunoprecipitation - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 was immunoprecipitated from 1mg of NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate with ab190966 at 1/50 dilution.
Western blot was performed from the immunoprecipitate using ab190966 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: NIH/3T3 whole cell lysate 10ug (Input).

Lane 2: ab190966 IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab190966 in NIH/3T3 whole cell lysate.

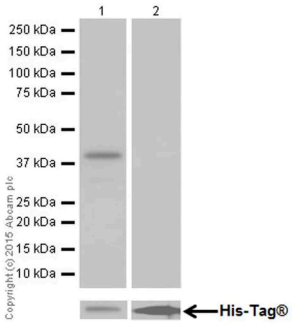
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 5 seconds.

All lanes:
Immunoprecipitation - Anti-GFPT2 antibody [EPR19095] (ab190966)

Predicted band size: 77 kDa

Observed band size: 77 kDa



Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 Western blot staining using rabbit Anti-GFPT2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1: 1 second; Lane 2: 3 minutes.
Human GFPT2 recombinant protein fragment contains aa2-305 with a His-Tag®, Human GFPT1 recombinant protein fragment contains aa2-288 with a His-Tag®.

All lanes:
Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966) at 1/2000 dilution

Lane 1:
Human GFPT2 recombinant protein fragment at 0.01 µg

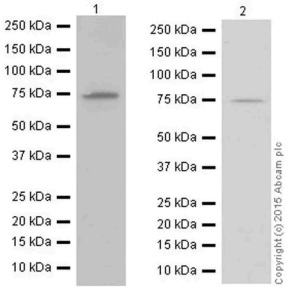
Lane 2:
Human GFPT1 recombinant protein fragment at 0.01 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 77 kDa

Observed band size: 33 kDa



Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 Western blot staining using rabbit Anti-GFPT2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966) at 1/2000 dilution

Lane 1:
U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell lysate at 10 µg

Lane 2:
Human glioma lysate at 10 µg

Secondary

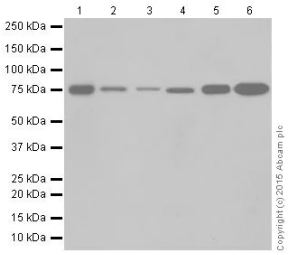
Lane 1:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lane 2:
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 77 kDa

Observed band size: 77 kDa

Exposure time: 3min



Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966)

GFPT2 Western blot staining using rabbit Anti-GFPT2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966) at 1/2000 dilution

Lane 1:
Mouse heart lysate at 10 µg

Lane 2:
Mouse kidney lysate at 10 µg

Lane 3:
Mouse spleen lysate at 10 µg

Lane 4:
Rat heart lysate at 10 µg

Lane 5:
Rat spleen lysate at 10 µg

Lane 6:
NIH/3T3 (Mouse embryo fibroblast cell line) whole cell lysate at 10 µg

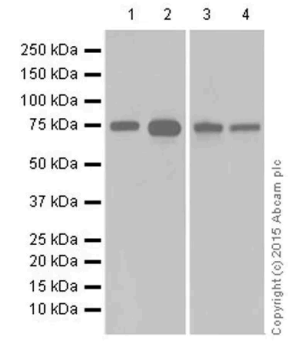
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 77 kDa

Observed band size: 77 kDa

Exposure time: 3min



Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time:

Lane 1 & 2: 3 minutes.

Lane 3 & 4: 5 seconds.

All lanes:
Western blot - Anti-GFPT2 antibody [EPR19095] (ab190966) at 1/2000 dilution

Lane 1:
Human placenta lysate at 20 µg

Lane 2:
Mouse placenta lysate at 20 µg

Lane 3:
A-375 (Human malignant melanoma cell line) whole cell lysate at 20 µg

Lane 4:
Rat placenta lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 77 kDa

Observed band size: 77 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.